REMARKS

2, 5, 7-13 and 15 of the present application are before the Examiner for prosecution on their merits.

Claims 5, 12 and 15 stand objected to because of informalities which have been appropriately corrected in accordance with the Examiner's suggestions.

Claims 2, 7 and 8-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Holzapfel et al. (US 6,392,224) in view of Braun (US 5,508,088), Shelander (US 4,899,048), and Jankowski (DE 19805207). To support the rejection, the Examiner attempts to read a majority of the claim features of the present application on Holzapfel's Figures 1, 2b and 2a, and to read the remaining features on Brauns's Figures 1b and 3, further on Shelander's Figure 1, and on Jankowski's Figures 2-4, from which the Examiner concludes that the invention of the aforementioned claims - which include in particular the two independent claims 10 and 12 - would have been obvious to a person of ordinary skill in the art at the time the invention was made.

In view of the foregoing rejection, applicant found it advisable to make further amendments in claims 7, 9, 10 and 12 to even more clearly set forth the features of the claimed invention. These amendments are clearly supported by the specification and drawings, and no new matter has thereby been introduced in the application.

As applicant has argued previously, Holzapfel et al. ('224) as well as Braun ('088) use only an opaque/transparent (or reflective/non-reflective) differentiation of the

markings, while claims 10 and 12 require " at least three different optical density levels ", so that at least Holzapfel et al., whether by itself or in any combination with Braun ('088), could not be said to make claims 10 and 12 obvious in the sense of 35 U.S.C. 103(a). However, citing a new reference in the Office Action of August 19, 2003, the Examiner found that "Jankowski teaches three different optical densities (Fig. 2-4)".

In response to the Examiner's finding of three optical densities in the Jankowski reference, applicants respectfully submit that the way in which the different optical densities are used by Jankowski is entirely different from the concept disclosed and claimed in the present application. Jankovski uses the three optical density levels only as a means to distinguish whether the ruler or timing device is moving forward or backward. Jankovski uses "sich wiederholende Folgen von Markierungen" (sequences of markings that repeat themselves), as stated in the third line of Jankowski's claim 1. Figure 2 shows an example of such a sequence, i.e., ...white-gray-black-white-gray-black- ... etc. In the reverse direction, the sequence is ... white-black-gray-white-black-gray... etc. The entire purpose and justification for using three density levels in the Jankowski reference is that they provide a means of differentiating between the forward and backward sense of direction. This is already made clear in the title of the Jankovski reference, "Verfahren zur Bestimmung einer Bewegungsrichtung" (Method for detecting a direction of movement).

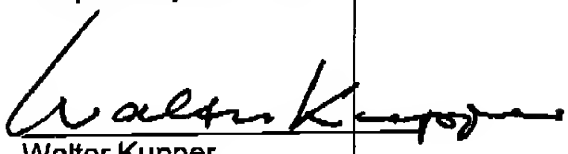
In contrast to Jankowski's repetitive sequences of white, gray and black bars, claims 10 and 12 of the present invention require at least one higher-order group of code markings that "are distributed over the code track with an arbitrary spacing and are formed by step changes from a first optical density level to at least a second optical density level of

said bars, said step changes serving for controlling different functions, wherein the basic, the first, and the at least second optical density levels are different in comparison to each other, so that there are at least three different optical density levels with a detectable gradation of optical density, and wherein the detectable gradation is used for generating control or position signals." Jankowski's concept of three optical density levels lacks at least the features that are underlined above, i.e., there is no higher-order group of code markings, they cannot be arbitrarily spaced, and they cannot be used for different functions nor for generating control or position signals. Thus, Jankowski's concept it is actually incompatible with the declared objective of the present application, and a skilled-in-the-art person looking for a solution at the time the present invention was made would therefore have found no help in the Jankowski reference.

Based on the foregoing amendment and remarks, applicant respectfully submits that independent claims 10 and 12 (as currently amended) are patentably distinguished from Holzapfel ('224), Braun ('088), Shelander ('048) and Jankowski (DE 19805207), regardless of whether these references are considered by themselves or in any combination. Consequently, the rejection of claims 10 and 12 under 35 U.S.C. 103(a) as being unpatentable over Holzapfel et al. (US 6,392,224) in view of Braun (US 5,508,088), Shelander (US 4,899,048) and Jankowski (DE 19805207) should be withdrawn and, since there are no other rejections concerning claims 10 and 12, claims 10 and 12 (as currently amended) should be allowed. Furthermore, claims 2, 5, 7-9, 11, 13 and 15 should be allowed because they depend on what should now be allowable independent claims 10 and 12.

Applicant respectfully submits that all open issues have been appropriately addressed. Allowance of the present application with claims 2, 5, 7-13 and 15 is hereby earnestly solicited.

Respectfully submitted,



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Attachment:

- Petition for a 3-month extension of time with appropriate fee